# **EAST Search History**

| Ref<br># | Hits  | Search Query   | DBs   | Default<br>Operator | Plurals | Time Stamp       |
|----------|-------|--|---|---------------------|---------|------------------|
| Ľ        | 699   | (562/450).CCLS.  | US-PGPUB;<br>USPAT                          | OR                  | OFF     | 2006/10/20 11:09 |
| L2       | 591   | L1 and @ad<="20060210"   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR                  | ON      | 2006/10/20 11:21 |
| L3       | 68439 | [3-(acetylamino)-4-cyclohexylphen<br>yl]-butanedioic           | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR                  | ON      | 2006/10/20 11:09 |
| L4       | 9     | L2 and L3 and autoimmune adj<br>disorder?                      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR                  | ON      | 2006/10/20 11:21 |
| L5       | 217   | (548/472).CCLS.  | US-PGPUB;<br>USPAT                          | OR                  | OFF     | 2006/10/20 11:13 |
| L6       | 173   | I5 and @ad<="20060210"   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR                  | ON      | 2006/10/20 11:13 |
| L7       | 53    | I5 and I3  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR                  | ON      | 2006/10/20 11:20 |
| L8       | 1020  | (514/411).CCLS.  | US-PGPUB;<br>USPAT                          | OR                  | OFF     | 2006/10/20 11:20 |
| L9       | 987   | L8 and @ad<="20060210"   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR                  | ON      | 2006/10/20 11:21 |
| L10      | 288   | L3 and I9  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR                  | ON      | 2006/10/20 11:21 |
| L11      | 12    | I10 and autoimmune adj disorder?                               | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR                  | ON      | 2006/10/20 11:22 |
| S1       | 15    | (("3663627") or ("3644479") or ("3940434") or ("2023000")).PN. | US-PGPUB;<br>USPAT;<br>EPO;<br>DERWENT      | OR                  | OFF     | 2006/10/19 07:57 |
| S2       | 500   | (560/180).CCLS.  | US-PGPUB;<br>USPAT                          | OR                  | OFF     | 2006/10/13 15:36 |

# **EAST Search History**

|     |         | LAST Searc  |   | <i></i> |     |                  |
|-----|---------|---|---|---------|-----|------------------|
| S3  | 252     | S2 and @ad<="20060210"  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR      | ON  | 2006/10/20 11:13 |
| S4  | 68296   | [3-(acetylamino)-4-cyclohexylphen<br>yl]-butanedioic                  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR      | ON  | 2006/10/16 17:22 |
| S5  | 500     | (560/180).CCLS.   | US-PGPUB;<br>USPAT                          | OR      | OFF | 2006/10/16 17:16 |
| S6  | 252     | S5 and @ad<="20060210"  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR      | ON  | 2006/10/16 17:16 |
| S7  | 19      | S6 and S4   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR      | ON  | 2006/10/16 18:29 |
| S8  | 2352220 | [3-(acetylamino)-4-cyclohexylphen<br>yl]-butanedioic acid             | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR      | ON  | 2006/10/16 17:22 |
| S9  | 248     | S6 and S8   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR      | ON  | 2006/10/16 18:25 |
| S10 | 20113   | [1,1'-biphenyl]-4-propanoic "acid,.<br>beta"(aminocarbonyl)-4'-cyano- | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR      | ON  | 2006/10/16 18:28 |
| S11 | 500     | (560/180).CCLS.   | US-PGPUB;<br>USPAT                          | OR      | OFF | 2006/10/16 18:29 |
| S12 | 252     | S11 and @ad<="20060210"   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR      | ON  | 2006/10/16 18:29 |
| S13 | 0       | S12 and S10   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR      | ON  | 2006/10/16 18:29 |
| S14 | 157     | S10 and matrix adj<br>metalloproteinase adj inhibitor?                | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR      | ON  | 2006/10/16 18:30 |
| S15 | 1       | ("20060142385").PN.   | US-PGPUB;<br>USPAT                          | OR      | OFF | 2006/10/17 07:35 |
| S16 | 2       | (("20060142385") or<br>("20060160875")).PN.                           | US-PGPUB;<br>USPAT                          | OR      | OFF | 2006/10/17 07:35 |

# **EAST Search History**

| S17 | 699   | (562/450).CCLS.                                   | US-PGPUB;<br>USPAT                          | OR | OFF | 2006/10/19 07:58 |
|-----|-------|---|---|----|-----|------------------|
| S18 | 591   | S17 and @ad<="20060210"                           | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2006/10/19 07:59 |
| S19 | 68439 | [3-(acetylamino)-4-cyclohexylphen yl]-butanedioic | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2006/10/19 07:59 |
| S20 | 206   | S18 and S19                                       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2006/10/20 11:09 |

# spec str p4

**Date of Search:** 

20 October 2006 at 9:50

Strategy:

(FILE 'HOME' ENTERED AT 09:51:22 ON 20 OCT 2006)

FILE 'REGISTRY' ENTERED AT 09:51:33 ON 20 OCT 2006

Lı STRUCTURE UPLOADED

o S L1 SSS SAM 6 S L1 SSS FULL L2  $L_3$ 

FILE 'CAPLUS' ENTERED AT 09:53:04 ON 20 OCT 2006

L4 1 S L3/PREP

#### ANSWER SUMMARY

- L3 ANSWER 1 OF 6 REGISTRY
- β-(aminocarbonyl)-4-(1H-indol-5-yl)-Benzenepropanoic acid; 845786-21-2 REGISTRY
- L3 ANSWER 2 OF 6 REGISTRY
- β-(aminocarbonyl)-3'-cyano-[1,1'-Biphenyl]-4-propanoic acid; 845786-19-8 REGISTRY
- L3 ANSWER 3 OF 6 REGISTRY
- β-(aminocarbonyl)-[1,1'-Biphenyl]-4-propanoic acid; 845786-18-7 REGISTRY
- L3 ANSWER 4 OF 6 REGISTRY
- 3'-acetyl-β-(aminocarbonyl)-[1,1'-Biphenyl]-4-propanoic acid; 845786-17-6 REGISTRY
- L3 ANSWER 5 OF 6 REGISTRY
- $\beta$ -(aminocarbonyl)-4'-(trifluoromethyl)-[1,1'-Biphenyl]-4-propanoic acid; 845786-16-5 REGISTRY
- L3 ANSWER 6 OF 6 REGISTRY
- β-(aminocarbonyl)-4'-cyano-[1,1'-Biphenyl]-4-propanoic acid; 845786-15-4 REGISTRY
- L4 ANSWER 1 OF 1 CAPLUS

Preparation of (hetero)aryl-substituted succinate derivatives as matrix metalloproteinase inhibitors; 2005:158625 CAPLUS

L4 ANSWER 1 OF 1 CAPLUS

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NEWS 13

OCT 19

NEWS 14 OCT 19 E-mail format enhanced

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
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NEWS 1
                 "Ask CAS" for self-help around the clock
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                INSPEC enhanced with 1898-1968 archive
NEWS 3 AUG 09
NEWS 4 AUG 28 ADISCTI Reloaded and Enhanced
NEWS 5 AUG 30 CA(SM)/CAplus(SM) Austrian patent law changes
NEWS 6
        SEP 11 CA/CAplus enhanced with more pre-1907 records
        SEP 21 CA/CAplus fields enhanced with simultaneous left and right
NEWS 7
                 truncation
NEWS
        SEP 25
                CA(SM)/CAplus(SM) display of CA Lexicon enhanced
NEWS
    9
        SEP 25
                CAS REGISTRY(SM) no longer includes Concord 3D coordinates
NEWS 10
        SEP 25
                CAS REGISTRY(SM) updated with amino acid codes for pyrrolysine
                CEABA-VTB classification code fields reloaded with new
NEWS 11 SEP 28
                classification scheme
NEWS 12 OCT 19
                The Derwent World Patents Index suite of databases on STN will
                be enhanced and reloaded on October 22, 2006
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ENTRY SESSION FULL ESTIMATED COST 0.21 0.21

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# http://www.cas.org/ONLINE/UG/regprops.html

0 20 C:\Program Files\Stnexp\Queries\stn str search practice\10569812\str in specs p4.str chain nodes : 13 14 15 16 17 18 19 20 21 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 ring nodes : 1 2 3 4 5 6 7 8 9 10 11 12 chain bonds : 5-8 11-13 13-14 13-18 14-15 15-16 15-17 18-19 18-20 28-29 29-30 29-31 29-32 33-34 35-36 37-38 ring bonds : 1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 exact/norm bonds : 18-19 18-20 28-29 exact bonds : 5-8 11-13 13-14 13-18 14-15 29-30 29-31 29-32 33-34 35-36 37-38 normalized bonds : 1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 15-16 15-17 G1:H,CF3,CN,C(O)CH3,NO2,[\*1],[\*2],[\*3],[\*4],[\*5],[\*6],[\*7],[\*8],[\*9]

Match level : 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:Atom 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS

#### L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s 11 sss sam

SAMPLE SEARCH INITIATED 09:52:11 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 16 TO ITERATE

100.0% PROCESSED 16 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 80 TO 560 PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s ll sss full

FULL SEARCH INITIATED 09:52:21 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 338 TO ITERATE

100.0% PROCESSED 338 ITERATIONS 6 ANSWERS

SEARCH TIME: 00.00.01

L3 6 SEA SSS FUL L1

=> d 13 1-6 hitstr

'HITSTR' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

SAM - Index Name, MF, and structure - no RN

FIDE - All substance data, except sequence data

IDE - FIDE, but only 50 names SQIDE - IDE, plus sequence data

SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used

SQD - Protein sequence data, includes RN

SQD3 - Same as SQD, but 3-letter amino acid codes are used

SQN - Protein sequence name information, includes RN

CALC - Table of calculated properties
EPROP - Table of experimental properties

PROP - EPROP and CALC

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ABS -- Abstract

APPS -- Application and Priority Information

BIB -- CA Accession Number, plus Bibliographic Data

CAN -- CA Accession Number

CBIB -- CA Accession Number, plus Bibliographic Data (compressed)

IND -- Index Data

STD -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels

IBIB -- BIB, indented, with text labels

ISTD -- STD format, indented

OBIB ----- AN, plus Bibliographic Data (original)

OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations SIBIB ----- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.

The MAX format is the same as ALL.

The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

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- L3 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN
- L3 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN
- L3 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN
- L3 ANSWER 5 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN
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SINCE FILE TOTAL ENTRY SESSION 179.22 179.43

FULL ESTIMATED COST

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```
=> s 13/prep
1 L3
3544032 PREP/RL
L4 1 L3/PREP
(L3 (L) PREP/RL)
```

=> d 14

#### L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN

=> d hitstr

### L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN

=> d his

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```
FILE 'REGISTRY' ENTERED AT 09:51:33 ON 20 OCT 2006
L1 STRUCTURE UPLOADED
L2 0 S L1 SSS SAM
L3 6 S L1 SSS FULL
FILE 'CAPLUS' ENTERED AT 09:53:04 ON 20 OCT 2006
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```
=> sav 11-14
ENTER NAME OR (END):mmp9812p4/1
```

=> sav 11-14 ENTER NAME OR (END):mmp812p4/1

=> sav 11-14 ENTER NAME OR (END):mmp812p4/l 'MMP812P4/L' IN USE

A single name cannot be used for two saved items at the same time. Enter "Y" if you wish to replace the current saved name with a new definition. Enter "N" if the current saved definition must be preserved. You may then reenter the SAVE command with a different

saved name. Enter "DISPLAY SAVED" at an arrow prompt (=>) to see a list of your currently defined saved names. REPLACE OLD DEFINITION? Y/(N):n

=> log y

COST IN U.S. DOLLARS

SINCE FILE
ENTRY
SESSION
FULL ESTIMATED COST

SINCE FILE
TOTAL
9.60
189.03

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NEWS 5 AUG 30 CA(SM)/CAplus(SM) Austrian patent law changes

NEWS 6 SEP 11 CA/CAplus enhanced with more pre-1907 records

NEWS 7 SEP 21 CA/CAplus fields enhanced with simultaneous left and right truncation

NEWS 8 SEP 25 CA(SM)/CAplus(SM) display of CA Lexicon enhanced

NEWS 9 SEP 25 CAS REGISTRY(SM) no longer includes Concord 3D coordinates

NEWS 10 SEP 25 CAS REGISTRY(SM) updated with amino acid codes for pyrrolysine

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ENTRY SESSION
0.21 0.21

FULL ESTIMATED COST

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20060510 EP 2004-764084 EP 1654218 A2 20040812 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR PRIORITY APPLN. INFO.: GB 2003-19069 A 20030814 WO 2004-EP9087 20040812 OTHER SOURCE(S): CASREACT 142:261292; MARPAT 142:261292 GI

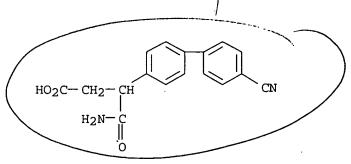
Title compds. represented by the formula I, R1ZQCH(R2)CH2X, [wherein R1 = (un)substituted alkyl(cycloalkyl), alkylheterocycloalkyl, alkylaryl, etc.; Z = a bond, CH2, O, S, etc.; Q = (un)substituted (hetero)aryl; X = COR3; R2 = CONH2, CO2H, sulfonylamino, etc.; R3 = OH, oxyalkyl or (un)substituted amino; with a proviso; and physiol. functional derivs. thereof] were prepd. as matrix metalloproteinase (MMP) inhibitors. Coupling reaction of 4-amino-3-(4-bromophenyl)-4-oxobutanoic acid with p-nitrilephenylboronic acid gave II in 100% yield. I showed inhibition of MMP-12 with IC50 values of below 100 .mu.M. Thus, I and their pharmaceutical compns. are useful as matrix metalloproteinase inhibitors for the treatment of inflammation or autoimmune disease (no data).

IT 845786-15-4P 845786-16-5P 845786-17-6P
845786-18-7P 845786-19-8P 845786-21-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation);
USES (Uses)

(prepn. of (hetero)aryl-substituted succinate derivs. as matrix metalloproteinase inhibitors)

RN 845786-15-4 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, .beta.-(aminocarbonyl)-4'-cyano- (9CI) (CA INDEX NAME)



RN 845786-16-5 CAPLUS

CN [1,1'-Biphenyl]-4-propanois acid, beta.-(aminocarbonyl)-4'
(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 845786-17-6 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, 3'-acetyl-.beta.-(aminocarbonyl)- (9CI) (CA INDEX NAME)

RN 845786-18-7 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, .beta.-(aminocarbonyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{C-NH}_2 \\ \mid \\ \text{CH-CH}_2\text{-CO}_2\text{H} \end{array}$$

RN 845786-19-8 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, .beta.-(aminocarbonyl)-3'-cyano- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{NC} \\ \\ \text{CH- CH}_2\text{--}\text{CO}_2\text{H} \\ \\ \text{C--}\text{NH}_2 \\ \\ \text{O} \end{array}$$

RN 845786-21-2 CAPLUS

CN Benzenepropanoic acid, .beta.-(aminocarbonyl)-4-(1H-indol-5-yl)- (9CI) (CA INDEX NAME)

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NEWS
     4
        AUG 28 ADISCTI Reloaded and Enhanced
        AUG 30
NEWS
     5
                CA(SM)/CAplus(SM) Austrian patent law changes
NEWS
        SEP 11
                CA/CAplus enhanced with more pre-1907 records
     6
NEWS
        SEP 21
                CA/CAplus fields enhanced with simultaneous left and right
                truncation
NEWS 8
        SEP 25
                CA(SM)/CAplus(SM) display of CA Lexicon enhanced
NEWS 9 SEP 25
                CAS REGISTRY(SM) no longer includes Concord 3D coordinates
NEWS 10 SEP 25 CAS REGISTRY(SM) updated with amino acid codes for pyrrolysine
NEWS 11 SEP 28
                CEABA-VTB classification code fields reloaded with new
                classification scheme
        OCT 19
NEWS 12
                The Derwent World Patents Index suite of databases on STN will
                be enhanced and reloaded on October 22, 2006
NEWS 13
        OCT 19
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FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 19 OCT 2006 HIGHEST RN 910855-26-4 DICTIONARY FILE UPDATES: 19 OCT 2006 HIGHEST RN 910855-26-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

Uploading C:\Program Files\Stnexp\Queries\stn str search practice\10569812\str in specs p4.str

chain nodes :

13 14 15 16 17 18 19 20 21 23 24 25 26 27 28 29 30 31 32 33 34

35 36 37 38

ring nodes:
1 2 3 4 5 6 7 8 9 10 11 12

chain bonds :

5-8 11-13 13-14 13-18 14-15 15-16 15-17 18-19 18-20 28-29 29-30 29-31

29-32 33-34 35-36 37-38

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

exact/norm bonds :

18-19 18-20 28-29

exact bonds :

5-8 11-13 13-14 13-18 14-15 29-30 29-31 29-32 33-34 35-36 37-38

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 15-16 15-17

G1:H,CF3,CN,C(O)CH3,NO2,[\*1],[\*2],[\*3],[\*4],[\*5],[\*6],[\*7],[\*8],[\*9]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:Atom 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS

#### L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s 11 sss sam

SAMPLE SEARCH INITIATED 09:52:11 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 16 TO ITERATE

100.0% PROCESSED 16 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 80 TO 560 PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 09:52:21 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 338 TO ITERATE

100.0% PROCESSED 338 ITERATIONS 6 ANSWERS

SEARCH TIME: 00.00.01

L3 6 SEA SSS FUL L1

=> d 13 1-6 hitstr

'HITSTR' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

REG - RN

SAM - Index Name, MF, and structure - no RN

FIDE - All substance data, except sequence data

IDE - FIDE, but only 50 names
SQIDE - IDE, plus sequence data

SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used

SQD - Protein sequence data, includes RN

SQD3 - Same as SQD, but 3-letter amino acid codes are used

SQN - Protein sequence name information, includes RN

CALC - Table of calculated properties EPROP - Table of experimental properties

PROP - EPROP and CALC

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ABS -- Abstract

APPS -- Application and Priority Information

BIB -- CA Accession Number, plus Bibliographic Data

CAN -- CA Accession Number

CBIB -- CA Accession Number, plus Bibliographic Data (compressed)

IND -- Index Data

IPC -- International Patent Classification

PATS -- PI, SO

STD -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels

IBIB -- BIB, indented, with text labels

ISTD -- STD format, indented

OBIB ----- AN, plus Bibliographic Data (original)

OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations SIBIB ----- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.

The MAX format is the same as ALL.

The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

HELP DFIELDS -- To see a complete list of individual display fields. HELP FORMATS -- To see detailed descriptions of the predefined formats. ENTER DISPLAY FORMAT (IDE):ide

- L3 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN
- RN 845786-21-2 REGISTRY
- ED Entered STN: 17 Mar 2005
- CN Benzenepropanoic acid,  $\beta$ -(aminocarbonyl)-4-(1H-indol-5-yl)- (9CI) (CA INDEX NAME)
- MF C18 H16 N2 O3
- SR CA
- LC STN Files: CA, CAPLUS, CASREACT

$$H_2N-C$$
 $HO_2C-CH_2-CH$ 
 $NH$ 

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN

RN 845786-19-8 REGISTRY

ED Entered STN: 17 Mar 2005

CN [1,1'-Biphenyl]-4-propanoic acid,  $\beta$ -(aminocarbonyl)-3'-cyano- (9CI)

(CA INDEX NAME)

MF C17 H14 N2 O3

SR CA

LC STN Files: CA, CAPLUS, CASREACT

$$\begin{array}{c} \text{CH-CH}_2\text{-CO}_2\text{H} \\ \text{C-NH}_2 \\ \text{O} \end{array}$$

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L3 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN

RN 845786-18-7 REGISTRY

ED Entered STN: 17 Mar 2005

CN [1,1'-Biphenyl]-4-propanoic acid, β-(aminocarbonyl)- (9CI) (CA INDEX NAME)

MF C16 H15 N O3

SR CA

LC STN Files: CA, CAPLUS, CASREACT

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN

RN 845786-17-6 REGISTRY

ED Entered STN: 17 Mar 2005

CN [1,1'-Biphenyl]-4-propanoic acid, 3'-acetyl- $\beta$ -(aminocarbonyl)- (9CI) (CA INDEX NAME)

MF C18 H17 N O4

SR CA

LC STN Files: CA, CAPLUS, CASREACT

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 5 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN

RN 845786-16-5 REGISTRY

ED Entered STN: 17 Mar 2005

CN [1,1'-Biphenyl]-4-propanoic acid,  $\beta$ -(aminocarbonyl)-4'-(trifluoromethyl)- (9CI) (CA INDEX NAME)

MF C17 H14 F3 N O3

SR CA

LC STN Files: CA, CAPLUS, CASREACT

$$\begin{array}{c|c} \text{HO}_2\text{C}-\text{CH}_2-\text{CH} \\ \text{H}_2\text{N}-\text{C} \\ \text{O} \end{array}$$

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN

RN 845786-15-4 REGISTRY

ED Entered STN: 17 Mar 2005

MF C17 H14 N2 O3

SR CA LC STN Files: CA, CAPLUS, CASREACT

$$HO_2C-CH_2-CH$$
 $H_2N-C$ 
 $0$ 

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 179.22 179.43

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 09:53:04 ON 20 OCT 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 20 Oct 2006 VOL 145 ISS 18 FILE LAST UPDATED: 19 Oct 2006 (20061019/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

=> s 13/prep

1 L3

3544032 PREP/RL

L4 1 L3/PREP

(L3 (L) PREP/RL)

=> d 14

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:158625 CAPLUS

DN 142:261292

TI Preparation of (hetero)aryl-substituted succinate derivatives as matrix metalloproteinase inhibitors

IN Holmes, Ian; Watson, Stephen Paul

```
Glaxo Group Limited, UK
PA
     PCT Int. Appl., 36 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LΑ
FAN.CNT 1
                                             APPLICATION NO.
     PATENT NO.
                          KIND
                                 DATE
                                                                      DATE
                          _ _ _ _
                                 -----
                                              -----
                                                                      _____
     WO 2005016868
PΙ
                           A2
                                 20050224
                                             WO 2004-EP9087
                                                                      20040812
     WO 2005016868
                          A3
                                 20050519
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
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                                             EP 2004-764084
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR
     US 2006235074
                           A1
                                 20061019
                                             US 2006-569812
                                                                      20060210
PRAI GB 2003-19069
                           Α
                                 20030814
     WO 2004-EP9087
                          W
                                 20040812
OS
     CASREACT 142:261292; MARPAT 142:261292
=> d hitstr
L4
     ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN
IT
     845786-15-4P 845786-16-5P 845786-17-6P
     845786-18-7P 845786-19-8P 845786-21-2P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation);
     USES (Uses)
        (preparation of (hetero)aryl-substituted succinate derivs. as matrix
        metalloproteinase inhibitors)
RN
     845786-15-4 CAPLUS
CN
     [1,1'-Biphenyl]-4-propanoic acid, β-(aminocarbonyl)-4'-cyano- (9CI)
     (CA INDEX NAME)
```

[1,1'-Biphenyl]-4-propanoic acid, β-(aminocarbonyl)-4'-

(trifluoromethyl) - (9CI) (CA INDEX NAME)

RN

CN

845786-16-5 CAPLUS

RN 845786-17-6 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, 3'-acetyl- $\beta$ -(aminocarbonyl)- (9CI) (CA INDEX NAME)

Ac 
$$CH-CH_2-CO_2H$$
  $C-NH_2$   $0$ 

RN 845786-18-7 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid,  $\beta$ -(aminocarbonyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{C-NH}_2 \\ \mid \\ \text{CH-CH}_2 - \text{CO}_2 \text{H} \end{array}$$

RN 845786-19-8 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid,  $\beta$ -(aminocarbonyl)-3'-cyano- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{NC} \\ \text{CH- CH}_2\text{--CO}_2\text{H} \\ \text{C--NH}_2 \\ \text{O} \end{array}$$

RN 845786-21-2 CAPLUS

CN Benzenepropanoic acid,  $\beta$ -(aminocarbonyl)-4-(1H-indol-5-yl)- (9CI) (CA INDEX NAME)

=> d his

(FILE 'HOME' ENTERED AT 09:51:22 ON 20 OCT 2006)

FILE 'REGISTRY' ENTERED AT 09:51:33 ON 20 OCT 2006

L1 STRUCTURE UPLOADED

L2 0 S L1 SSS SAM L3 6 S L1 SSS FULL

> FILE 'CAPLUS' ENTERED AT 09:53:04 ON 20 OCT 2006 1 S L3/PREP

=> sav 11-14

L4

ENTER NAME OR (END): mmp9812p4/1

=> sav 11-14

ENTER NAME OR (END): mmp812p4/1

=> sav 11-14

ENTER NAME OR (END): mmp812p4/1

'MMP812P4/L' IN USE

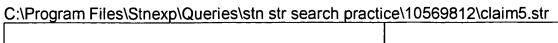
A single name cannot be used for two saved items at the same time. Enter "Y" if you wish to replace the current saved name with a new definition. Enter "N" if the current saved definition must be preserved. You may then reenter the SAVE command with a different saved name. Enter "DISPLAY SAVED" at an arrow prompt (=>) to see a list of your currently defined saved names. REPLACE OLD DEFINITION? Y/(N):n

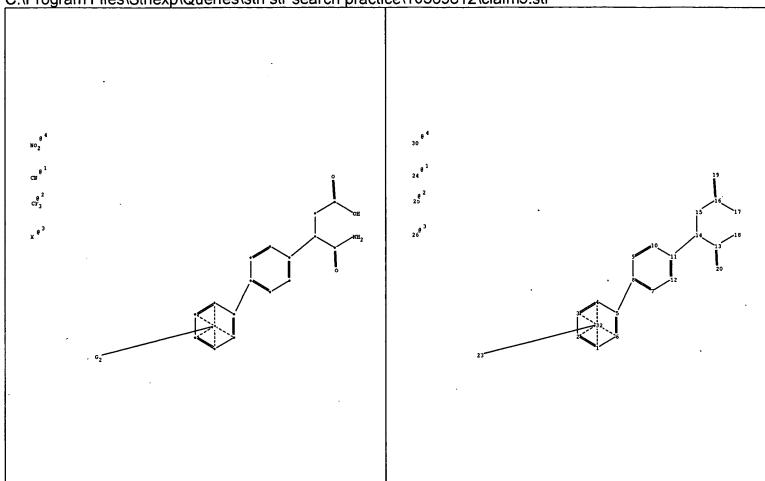
=> log y COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 9.60 189.03

FULL ESTIMATED COST

STN INTERNATIONAL LOGOFF AT 09:58:41 ON 20 OCT 2006





chain nodes:

13 14 15 16 17 18 19 20 23 24 25 26 30

ring nodes:

1 2 3 4 5 6 7 8 9 10 11 12

chain bonds:

5-8 11-14 13-14 13-18 13-20 14-15 15-16 16-17 16-19

ring bonds:

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

exact/norm bonds:

13-18 13-20

exact bonds:

5-8 11-14 13-14 14-15 15-16

normalized bonds:

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 16-17 16-19

G1:H,X,CF3,CN,NO2

G2:CF3,X,H,CN,NO2,[\*1],[\*2],[\*3],[\*4]

## Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:CLAS£14:CLAS£15:CLAS£16:CLAS£17:CLAS£18:CLAS£19:CLAS£20:CLAS£23:CLAS£24:CLAS\$ 25:CLASS

[3-(acetylamino)-4-cyclohexylphenyl]-butanedioic acid diethyl ether

[3-(acetylamino)-4-cyclohexylphenyl]-butanedioic acid

[3-methoxy-4-(phenylmethoxy)phenyl]-butanedioic acid

[4-(phenylmethoxy)phenyl]-butanedioic acid